

ACC

AC/TNS/69

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METHANE
DEC. 1944 - FEB. 1945

RESTRICTEDS/158
MAY 21/1100BE/1751
MAY 21/1930B
PRIORITY

HQ AMG TOSCANA REGION SUPPLY DIVISION
 ALCON FOR COMMERCE SUB COMMISSION FOR PET SECTION HOME AREA ALLIED COMMAND
 INFO: APMQ PET SEC

RESTRICTED.

Subject is Methane. Present figures vehicles running on methane, trucks
 395 cars 247 supplies by RACI. These figures stated to be highest yet reached
 which indicates that no vehicles are now using benzine which previously used
 methane. Pressure being brought to bear for maximum scrutinizing in FLORENCE
 Province.

DIST

ACTION : COMMERCE SC

INFO : A/PRESIDENT
 CHIEF COMMISSIONER
 ECON SEC
 TN SC (2)
 FILE (2)
 FLOAT

1918

HEADQUARTERS

22 MAY 1945

A. C

RESTRICTED

HEADQUARTERS ALLIED COMMISSION
APO 394
COMMERCE SUB-COMMISSION

AMB/ha.

Ref. AC/5146/10/Commerce/POL. 7

Tel. Rome 478829

12 February 1949

SUBJECT: Methane gas.

TO : R.C. Emilia Region
" " Lombardia "
" " Venezia "
SCAC 5th & 8th Armies.

1. Pol Instructions No 5 of 24 November 1944, AC/5146/Commerce of 28 December 1948, AC/5146/10/Commerce of 23 January 1949 and attached copy of PET 30/0/10 of 21 January (copies attached) refer.
2. The supplies of methane gas available in Toscana Region are already greater than can be used owing to shortage of apparatus and objections to its use by the public, based largely on the fact that there is no Black Market in methane whereas a truck operating on POL can fairly readily obtain Black Market Supplies.
3. Methane gas is also generally available in Emilia, Lombardia and parts of Veneto and there are producing centres in Rovigo, Ferrara, Parma and Piacenza Provinces. The total output is equivalent to 50,000 tons of imported POL per annum and it is therefore becoming increasingly important that all available apparatus should be found and made available for use and that those vehicles equipped to burn methane, of which there are a very large number in the Emilia and Lombardia Regions, should not be permitted to convert to petrol.
4. It is requested therefore, that the following arrangements may be made, so far as possible, in advance of entry into the territory.
 - (a) Two methane Civilian Technicians to proceed with Eighth and Fifth Armies, A.E.C., to forward areas at the first opportune time.
 - (b) No vehicle operating license or permit to be issued

1917

- 2 -

until the individual concerned produces the card previously issued by U.S.A. Section of S.P.S., on which is stated the type of use on which the vehicle operated, and discloses the whereabouts of the Methane apparatus. A list to be kept of all such apparatus.

(c) Licenses for essential vehicles which must circulate during the first phase on petrol should be issued only on a minimum temporary basis not to exceed 30 days, and the owner must be fully instructed to be prepared to use Methane at its first availability.

(d) Distribution of Methane is impossible without the necessary equipment. A.M.C. Decree should immediately be issued freezing and blocking all Methane carrying cylinders, requiring the denouncement of possession of cylinders, giving location and instructions of collection of cylinders at points to be immediately designated. (Decree regarding the above can be modeled after that already issued by Tuscan Region (copies in English and Italian attached)).

For the Chief Commissioner:

Maj. A.S. BRERETON

for
W. P. EVANS
Colonel
Director
Commerce Sub-Commission

Copy to:
AG 15 Army Group
Pet. Sec. AFHQ, RAC
Piemonte Region
Liguria "
Toscana "
Industry Sub-Commission

4 Encls. (see para # 1)

1216

HEADQUARTERS ALLIED COMMISSION

APO 394

Transportation Sub-Commission

CWAP/fd

AC/R/58/Tn 5

30 January 1945

Meeting in Colonel Carnes' Office

SUBJECT : Methane - Conversion of W.D. Trucks for use of.

Present : 1. Colonel Carnes
 2. Colonel Eyles
 3. Lt. Col. Bordass
 4. Lt. Col. Harris
 5. Maj. Breerton
 6. Maj. Pepper
 7. Mr. West
 8. Mr. Velani
 9. Mr. Piga

The meeting was opened by Colonel Carnes for the purpose of determining the advisability of trying to make some plan to convert Government trucks to use Methane rather than gasoline in view of saving shipping and making utilization of a local product.

Colonel Carnes stated that certain difficulties presented themselves and asked the CIP representatives to state their position, and the Road Division representative to give information as to what AC's responsibility was in reference to military trucks, lifts, etc., in order that a decision could be reached as to how many, if any, trucks should be converted to use methane.

Colonel Eyles stated that before the Allies came into Italy the Italians had developed the use of the Methane gas as a natural product, so that an equivalent of 60,000 tons of gasoline could be produced, 8,000 tons used in Florence area and 52,000 tons in the north. The weight of the apparatus used restricted range of action. If vehicles were to run a radius of 60 miles, containers must be transported for use. The weight of the containers and the shortage of transport was such, that the question of the transport of full containers had not been considered. The re-introduction of this was being tried in Florence, with some success, using Italian trucks (no WD vehicles were being used) and an attempt was going to be made to do the same thing in northern Italy.

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the plan to use WD vehicles was carried out it would mean a considerable volume of gasoline would be consumed and the problem presented itself as to whether it would be worthwhile or possible to make advance preparations for collecting the conversion apparatus for use in the Allied Commission trucks.

The question was raised as to whether or not the conversion material was available; it was brought out that there was no accurate knowledge of the number of vehicles which had been converted before, but that a large number of vehicles had been converted from which the containers had been removed so that they could run on gasoline.

Colonel Carnes stated that it might be possible to get pipes, gauges, lines, but that AC did not have the carburetors which would be required for Methane. In answer to Colonel Lyles' question of whether or not 3-ton trucks could be converted to use Methane, it was stated that the mixture was to be adapted to the carburetor. It was pointed out that a special carburetor was not necessary; that it could be introduced into a normal carburetor and have double carburation for use either with methane or gasoline. Colonel Carnes asked whether we could use standard equipment, and was told that additional equipment would be necessary, and that it might be possible to get a certain amount of it.

Mr. West stated that since it was more convenient to use gas than methane, where they had double carburation, the operator would use gasoline.

Colonel Carnes asked whether or not the number of W.D. trucks that would have to be modified would warrant such necessary modification i.e. was it not possible that a number of civilian trucks might be found already so equipped sufficient to consume all the Methane available.

Mr. West stated that there was available in well heads in the Po Valley more methane than could be consumed by the number of vehicles that were likely to be found there.

He also stated that there was 16,000 cubic meters of methane in Florence for vehicles' use at present, and it could not be envisaged how half of it could be used in the next two or three months.

Colonel Lyles stated this was partly due to Italian opposition to the use of methane, since there was no black market in this commodity as in the case of gasoline.

Colonel Carnes suggested that it might be possible, as an experiment, to convert some of the W.D. trucks now being employed in the Florence area, but it was pointed out that such trucks were employed on comparatively long distance hauls, rendering the use of methane impracticable.

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Colonel Carnes stated that it might be possible to get pipes, gauges, lines, but that AG did not have the carburetors which would be required for Methane. In answer to Colonel Tyles' question of whether or not 3-ton trucks could be converted to use Methane, it was stated that the mixture was to be adapted to the carburetor. It was pointed out that a special carburetor was not necessary; that it could be introduced into a normal carburetor and have double carburation for use either with methane or gasoline. Colonel Carnes asked whether we could use standard equipment, and was told that additional equipment would be necessary, and that it might be possible to get a certain amount of it.

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Colonel Carnes suggested that it might be possible, as an experiment, to convert some of the W.D. trucks now being employed in the Florence area, but it was pointed out that such trucks were employed on comparatively long distance hauls, rendering the use of methane impracticable owing to the amount of containers that would have to be carried in view of the fact that no compressing stations were available on the routes used.

Colonel Tyles stated that the Petrol Section had asked AMG to supply the names of all owners whose vehicles had at any time been converted to the use of methane, in order that the conversion equipment could be collected.

Colonel Carnes asked whether, in the event of it being possible to collect the equipment, it would be practicable to use same on civilian vehicles in the Rome area.

Colonel Eyles replied that such procedure would be impossible in view of the fact that Methane would have to be transported from the Florence area to Rome (due to lack of any pipe line) which would not be practicable procedure owing to the enormous weight of the containers.

It was then pointed out that one of the main hauls would be along the route Forli, Bologna, Parma, Milan, and that it was known that a pipe line existed in that vicinity and that an adequate number of compressing stations had been established. Provided that these could still be utilized, Methane could be used, at any rate on that route, with advantage. It was then decided that A.C. would furnish CIP with a truck which would be converted for the use of Methane. This truck would operate in the Florence area for the purpose of determining the effect, if any, of the use of Methane on the vehicle; it would also permit CIP to determine the equipment necessary for modifications. It was agreed that CIP would collect and prepare all equipment necessary to modify V.D. trucks, and upon arrival in the area they would turn this equipment over, with plans for modification, to the Truck Battalion so that these modifications could be made quickly.

It was further agreed that all trucks modified would operate on either Methane or Gasoline.

Chas. H. H. H. H. H.
Major R.A.S.C.
Admin. Officer
Roads Section

1914

HEADQUARTERS ALLIED COMMISSION

ATO 394

COMMERCE SUBCOMMISSION

ASB/ty

Ref. AC/5146/10 Commerce/POB 1

Tel. Room 473829
29 January 1945

SUBJECT: Extracts from reports.

TO : ~~Petroleum Section, AFM~~
Rome Area Allied Command.

1. Attached are extracts from PWB (Unit No 14)
No 2 Intelligence report covering Tuscany and ad-
joining regions of liberated Italy.

For the Chief Commissioner:

W. P. EVANS

for
W. P. EVANS
Colonel
Director
Commerce Sub-Commission

1 Encl. (as above refers)

Copy to: Transportation S/C ✓
(with enclosure)

1913

COPY

ITALIAN THEATRE HEADQUARTERS
Psychological Warfare Branch
Unit No 14 APO 512

CONFIDENTIAL
18 January 1945

"D" section

No 2 INTELLIGENCE REPORT COVERING TUSCANY AND ADJOINING REGIONS OF
LIBERATED ITALY

Page. 5 para 5 ECONOMIC

S.C.A.O. Talks on Civic Problems.

" This week Lt. Col. T. J. Michie, S.C.A.O. began a series of conversations with representatives of the local press to inform the people of Florence respecting many problems of vital interest to them, and also to be informed in his turn as to the needs of the population.

Gas

This will be distributed at the end of February. The heating of the gas ovens began towards the end of December and about 60 days are required to reach a temperature sufficient for the distillation of the gas, which will be composed of a mixture of methane and other gases derived from the distillation of coke, lignite and olive sansa (the refuse left after oil-crushing). This gas, of excellent heating quality, will at first be available only on the north side of the river, since the pipes which passed over the river have been destroyed, together with the bridges, by the Germans. "

Page. 7 para 6 Interview with the Manager of the Gas Company (Florence)

The heating of the retorts was started some time ago and on February 1st work on the clearing of the air from the pipes will begin. It is expected that gas will be available to the public on February 20th (but see ante).

The gas will be composed of a special mixture, of coal, lignite and olive sansa gases and a good percentage of methane furnished by the Società Idrocarburi Nazionali.

It is expected to make a daily distribution of 70,000 cubic metre equivalent to 2000-2002 calories for the first days, with a progressive increase which in a maximum period of two months ought to be fully doubled.

The gas will be distributed according to a fixed time-table, as it is calculated that it will be possible to give it for 3 or 5 hours a day. The question of the cost to the user has not yet been

1912

No. 2 INTELLIGENCE REPORT COVERING TUSCANY AND ADJOINING REGIONS OF LIBERATED ITALY

p. 10 para 5 ECONOMIC

L.C.A.O. Talks on Civic Problems.

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Page 9 para 11. Natural Gas in Substitution of Petrol.

- 2 -

AMG issued an order some time ago for the conversion of low-powered vehicles to natural gas (methane). January 1st was set as the deadline, but owing to technical difficulties the term was extended. The vehicles affected are those under 10 gls registered in the Comune of Florence.

Reactions to the change-over are conflicting. RACI and the Regional Transport Board (Italian) favour the plan: the drivers, on the contrary, are decidedly opposed to it. They see no reason, for instance, why they should have to pay 11 lire per cubic metre as against 3 lire charged to the hospitals: the absence of filling stations in the countryside exposes them to the risk of being stranded on the road; the order is discriminatory in that it applies only to the Comune of Florence. These points were made by a group of drivers to the Società Idrocarburi Nazionale which is in charge of the technical arrangements for the changeover. The drivers left the Company's offices protesting and threatening to put out of gear any methane installations they came across, unless the order were cancelled. And to show that theirs was no idle threat, they compelled the driver of the first methane-driven truck they met on their way home to dismantle his installation.

As against the drivers' grievances certain definite advantages accrue from the running of light vehicles on methane. Actually something like 8,000 cubic metres of methane is daily available in Florence and the use of this would release a sizeable volume of petrol. The gain from the price differential complained of is returned to public funds via the CIP (Comitato Italiano Petroli) and does not go to swell anybody's banking account. A considerable amount of Black Market activity is automatically suppressed by the elimination of the corresponding petrol coupons, which serve as a sort of legal tender.

According to RACI the number of vehicles affected is about 700 and there would seem to be sufficient parts for their conversion as also a fair supply of cylinders for holding the gas.

Col Thomas

In as much as the trucks going into the NW area in its ^{first} stage will be used in ^{long distance} hauling it is believed not good policy to convert said trucks to the use Mathane.

After entering the area it is found that Mathane is available in large enough quantities to enable its use for local or short hauls the trucks making these hauls should be converted to the use of Mathane.

The shortage of high pressure containers, valves, high pressure tubing etc for converting ~~mathes~~ might lead into complications that would hinder the ~~initiat~~ the movement of goods into the area.

Gross

1310

C O P YENTE NAZIONALE METANO

Rome, 20 December 1944.

SUBJECT: Request for Collaboration.

TO : Allied Commission, Via Veneto, Rome.

This Ente understands that your Commission has taken certain steps regarding the utilisation of methane gas in liberated Italy.

Undoubtedly such steps represent a tangible contribution to the rehabilitation of national industry which, as regards methane, thanks to the work carried out by the Ente Nazionale Metano, had during the last few years reached an annual production of about 5,000,000 cubic metres.

According to law No. 1501 of October 2, 1940, the scope of the Ente is to develop the production of methane, regulating its distribution and utilisation.

In the fulfilment of its task and by virtue of studies and researches the Ente has built up considerable geological, mineral, technical and statistical assets and furthermore owns methane cylinders and mines adequately equipped with compressor apparatus.

In consideration of the fact that the above material, which was for the greater part destined to be transported north, was instead kept in the now liberated territory at no slight risks, and as by virtue of the Decree Law No. 249 of the 5th October 1944, the Ente has resumed its work in its legal office in Rome, this Ente wishes to cooperate in any steps which the Allied Commission plans to take in connection with the methane industry.

This request is also put forth in consideration of the fact that besides the assets of a scientific nature mentioned above, which represent the sole and indispensable guide in the exploration and exploitation of methane deposits and in the utilisation thereof, this Ente could also advantageously make use of the ability of its own experts.

ENTE NAZIONALE METANO

By power of attorney of the General Manager

s/ Rosati

1969

C O P Y

(C o p y)

AFHQ PETROLEUM SECTION

ROME AREA ALLIED COMMAND

SUBJECT: Memorandum on Utilization
of Methane in Northern and
Northwest Italy.

Tel:- ROME 478875

PET 30/C/10

HQ.A.C. Transportation Sub-Commission
HQ.A.C. Commerce Sub-Commission
HQ.A.C. Industry Sub-Commission .

13 Jan. 45

1. Attached is a rough memorandum which it is suggested should form the basis of a discussion between the interested parties. There is a vital need to reduce to the minimum the quantities of petroleum imported in order that corresponding saving in tankers may be made.
2. It is, therefore, requested that this paper should be studied and that a meeting should thereafter be held with representatives of Allied Commission, Transportation, Commerce, and Industry Sub-Commissions, with a possible addition of Italian technical experts from C.I.P.
3. Please advise if you are in agreement with this proposal and, if so, suggest a suitable time for this meeting.

H. B. EYLES
Colonel
Petroleum Section

Enclosure.

1938

(Copy)

13 January 1945

Utilization of Methane in Northern and Northwest Italy.

1. The following information has been obtained from reports from Northern and Northwest Italy.

- (a) Potential production of Methane in 1943 was in the region of the equivalent of 52,000 tons of gasoline per annum.
- (b) Pipeline believed to exist running along at via Emilia, from Bologna to Milan.
- (c) Almost the whole of the remaining automotive Italian transport had been converted to the use of Methane.
- (d) By the end of 1944, the Germans had moved nearly all the useful vehicles from Italian control in the Po Valley but were not operating them when under Army control on Methane.

2. It seems probable from our experience in the Florence Region and from an assessment of possibilities in the Po Valley which have been based on discussions with those who have come through the lines, that

- (a) it will be possible to rehabilitate some proportion, at least, of the Methane production and distribution system;
- (b) there will be a shortage of high pressure containers;
- (c) there will be an even greater shortage of valves for the said containers;
- (d) there will be a shortage of high pressure tubing.

3. The effect of the use of Methane instead of gasoline on a three ton vehicle is approximately to reduce its carrying capacity by some 800 pounds. Each truck uses on an average approximately a 100 pounds of gasoline per day. It will take a minimum of 5 days per truck to convert to Methane after materials are all at hand.

4. There is an urgent need to reduce to the minimum the quantity of petroleum products imported by sea into Italy, and every cubic meter of Methane which can be employed in substitution of imported petroleum reduces the quantity to be imported.

5. It has been decided that all possible Italian vehicles in areas where Methane is available (other than those engaged on long distance haulage away from such areas) will remain adapted or will be adapted for the use of Methane. It is now for consideration whether arrangements should not be made in advance for the conversion of a proportion at least of the trucks to be operated on

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civilian business by Allied Commission, in order that a saving may be effected both in over-sea transport to Italy and the over-land haul over the Appennines into the Po Valley.

6. It will be seen that even if the average over-land haul from port of importation to the Po Valley be taken as double the length of the average haul within the Po Valley, the sacrifice of useful carrying capacity in the Po Valley will be still four times as great as the saving in carrying capacity resulting from the use of Methane found on the spot.

7. In general, vehicles engaged on local distribution do not run full, and at the same time, many classes of commodities are of such bulk that the presence of 800 pounds of Methane equipment will not reduce the load carried. It is, therefore, worthwhile examining the possibilities of making preparation in advance for the utilization of Methane by some W.D. vehicles operated by Allied Commission on civilian economy.

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